

DEC 26 2006

Application No.: 10/721,615

Docket No.: NGW-014RCE

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A fuel cell system comprising:

a fuel cell for generating electricity using a hydrogen gas and an oxidant gas as a reaction gas;

a hydrogen discharge unit for discharging hydrogen from the fuel cell under a predetermined condition;

a hydrogen concentration reduction process unit for reducing the concentration of hydrogen discharged from the hydrogen discharge unit; and

a hydrogen concentration detection unit for detecting an instantaneous hydrogen concentration of a gas processed by the hydrogen concentration reduction process unit, ~~in which a hydrogen discharge from the fuel cell by the hydrogen discharge unit is prohibited in the event that an instantaneous hydrogen concentration detected by the hydrogen concentration detection unit exceeds a first threshold; and~~

~~wherein the fuel cell system further comprises~~

an average hydrogen concentration calculating unit for calculating an average hydrogen concentration per hour of a gas processed by the hydrogen concentration reduction process unit, wherein

the discharge of a hydrogen discharge from the fuel cell by the hydrogen discharge unit is prohibited in the event that the instantaneous hydrogen concentration does not exceeds the a first threshold; but or the average hydrogen concentration calculated by the average hydrogen concentration calculating unit exceeds a second threshold which is lower than the first threshold, and

the discharge of hydrogen from the fuel cell by the hydrogen discharge unit is permitted in the event that the instantaneous hydrogen concentration does not exceed the first threshold and the average hydrogen concentration does not exceed the second threshold.

2. (Currently Amended) A fuel cell system as claimed in claim 1, further comprising a

cell voltage sensor for detecting a cell voltage of the fuel cell so that the discharge of the hydrogen discharge from the fuel cell by the hydrogen discharge unit can be permitted or prohibited selected based on the cell voltage.

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3. (Currently Amended) A fuel cell system as claimed in claim 1, wherein the hydrogen discharge from the fuel cell ~~by the hydrogen discharge unit can be performed~~ discharged intermittently by the hydrogen discharge unit.